

Appendix 2-2 Channelizing Device Application Matrix

Device Type	Low Speed (40 mph or less)	High Speed (45 mph or greater)
Cones – Tangent	✓	✓
Cones – Taper	✓	A*
Tall Channelizing Devices – Tangent	✓	✓
Tall Channelizing Devices – Taper	✓	✓*
Drums – Tangent	✓	✓
Drums – Taper	✓	R
Tubular Markers	✓	x*

A – Allowed, consider using a more dominate device.

R – Recommended device.

✓ – May be used in this situation.

x – Requires approval by Region Traffic Engineer.

* – Double the amount of devices in taper, use HALF-SPACING column below (20 feet).

Channelizing Device Spacing Chart (Feet)			
MPH	*Half-Spacing*	Taper	Tangent
50/70	20	40	80
35/45	N/A	30	60
25/30	N/A	20	40

Channelization Devices (see [MUTCD](#) Part VI and this manual for additional guidance)

- All channelizing devices must comply with the requirements of the [MUTCD](#), [NCHRP 350](#) crash performance requirements, and [Standard Specifications](#).
- Cones – Freeway, high speed and night use requires 28 inches minimum height cones with two white retroreflective bands. Low speed daytime use allows 18-inch cones without retroreflective bands.
- Tall Channelizing Devices – 42 inches in height minimum, using a tapered cone type shape of consistent dimensions regardless of orientation to traffic. A minimum of two white and two orange retroreflective horizontal stripes 6 inches wide.
- Drums – 36 inches in height and at least 18 inches wide of consistent dimensions regardless of orientation to traffic. A minimum of two white and two orange retroreflective horizontal stripes 4 to 6 inches wide.
- Tubular Markers – Tubular markers should only be used where space restrictions do not allow for other more dominate devices. Tubular markers may be used to divide opposing traffic lanes, divide open lanes in the same direction and to delineate the edge of a pavement drop off. Freeway, high speed and night use requires a 28-inch minimum height with two white retroreflective bands. Low speed daytime use allows 18-inch tubular markers with one retroreflective band.
- **Flat panel devices and devices with directional stripe patterns are not allowed.**